PROJECT DESCRIPTION

GENERAL

THIS PORTION OF THE PROJECT INVOLVES THE RECONSTRUCTION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 97 (GEORGIA AVENUE) AND BEL PRE ROAD IN MONTGOMERY COUNTY, MARYLAND.

MD 97 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL OPERATE IN A NEMA EIGHT-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 97 APPROACHES OPERATING CONCURRENTLY. DOUBLE EXCLUSIVE LEFT-TURN PHASES WILL BE PROVIDED FOR BOTH MD 97 APPROACHES AND EXCLUSIVE/ PERMISSIVE LEFT-TURN PHASES WILL BE PROVIDED FOR BOTH BEL PRE ROAD APPROACHES. ALTERNATE PEDESTRIAN PHASE WILL BE PROVIDED ACROSS THE SOUTH LEG OF MD 97. PEDESTRIAN INDICATIONS WILL BE PROVIDED ACROSS BOTH BEL PRE ROAD APPROACHES.

CONTROLLER REQUIREMENTS

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH L.A.U., L.A.U. PANEL AND TWO (2). FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

MAINTENANCE OF TRAFFIC

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT.

STANDARD NO. MD-104.00 - 104.00-30

STANDARD NO. MD-104.45-01 (RIGHT LANE CLOSURE) STANDARD NO. MD-104.37-01 (LEFT LANE CLOSURE) STANDARD NO. MD-104.46-01 (CENTER LANE CLOSURE) STANDARD NO. MD-104.38-01 (RIGHT LANE CLOSURE) STANDARD NO. MD-104.48-01 (INTERSECTION TURN

MR. AUGUSTINE REBISH DISTRICT UTILITIES ENGINEER PHONE: (301) 513-7350

PHONE: (410) 787-7630

MR. RICHARD L. DAFF. SR. CHIEF. TRAFFIC OPERATIONS DIVISION

STANDARD NO. MD-104.41-01 (INTERSECTION FAR-RIGHT

BAY LANE CLOSURE) STANDARD NO. MD-104.49-01 (SHOULDER WORK) LANE CLOSURE)

STANDARD NO. MD-104.43-01 (SHOULDER WORK)

STANDARD NO. MD-104.44-01 (LEFT LANE CLOSURE)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. CHARLES WATKINS DISTRICT ENGINEER PHONE: (301) 513-7311

MR. MAJIB SHAKIB ASSISTANT DISTRICT ENGINEER - TRAFFIC PHONE: (301) 513-7358

MR. RANDY BROWN ASSISTANT DISTRICT ENGINEER - MAINTENANCE PHONE: (301) 513-7304

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

| CATAGORY CODE NO. | QUANTITY | DESCRIPTION |
|----------------------|----------|--|
| 971017 | 1 EACH | EIGHT PHASE: FULL TRAFFIC-ACTUATED CONTROLLER WITH SYSTEM PACKAGE HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET |
| 973023 | 176 S.F. | SHEET ALUMINUM SIGNS TO CONSIST OF: |
| | | - 4 EACH R3-5(L) SIGN (30 IN. X 36 IN.) - MAST ARM MOUNT |
| | | - 2 EACH R10-12 SIGN (36 IN. X 42 IN.) - MAST ARM MOUNT |
| | | 2 EACH D-3(1) SIGN "BEL PRE ROAD" (VARIABLE x 16") DUAL FACED - ARM MOUNT |
| | | - 2 EACH D-3(1) SIGN "GEORGIA AVE" (VARIABLE x 16") DUAL FACED - ARM MOUNT |
| | | - 1 EACH ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 97, LEFT ARROW" (36 IN. X 75 IN.) - POLE MOUNT |
| | | - 1 EACH ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 97 LEFT ARROW (36 IN. x 75 IN.) - POLE MOUNT |
| | | - 1 EACH M3-1 (30 IN. x 15 IN.) - GROUND MOUNT |
| | | - 1 EACH M3-3 (30 IN. x 15 IN.) - GROUND MOUNT |
| | | - 2 EACH M1-5 (36 IN. x 36 IN.) - GROUND MOUNT |
| | | - 2 EACH M6-1(R) (30 IN. x 24 IN.) - GROUND MOUNT |
| | | - 1 EACH W9-2(4) (30 IN. x 42 IN.) - MAST ARM MOUNT |

EQUIPMENT LIST "B" CONT.

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

| CATEGORY CODE NO. | QUANTITY | DESCRIPTION |
|----------------------|-----------|--|
| 800000 | 1 EACH | FURNISH AND INSTALL VIDEO TRAFFIC DETECTION SYSTEM |
| 800000 | 1205 L.F. | FURNISH AND INSTALL VIDEO TRAFFIC DETECTOR CABLE |
| 800000 | 450 L.F. | PULL BACK AND RE-FEED EXISTING ELECTRICAL CABLE |
| 800000 | 2 EACH | FURNISH AND INSTALL PEDESTRIAN PUSHBUTTON AND R10-4(1) SIGN (NOTE: SIGN TO READ "PUSH BUTTON TO CROSS GEORGIA AVENUE") |
| 800000 | LUMP SUM | REMOVAL OF EXISTING SIGNAL EQUIPMENT TO BE SALVAGED |
| 800000 | LUMP SUM | DELIVERY OF SALVAGED SIGNAL EQUIPMENT AND MATERIAL |
| 800000 | 1 EACH | FURNISH AND INSTALL 3 IN. WEATHERHEAD |

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

| CATEGORY CODE NO. | QUANTITY | DESCRIPTION |
|----------------------|-----------|--|
| 120500 | LUMP SUM | MAINTENANCE OF TRAFFIC |
| 120610 | 7 U.D. | ARROW PANEL |
| 120620 | 300 S.F. | TEMPORARY TRAFFIC SIGNS |
| 203030 | 10 C.Y. | TEST PIT EXCAVATION |
| 585620 | 745 L.F. | 12 IN. WHITE THERMOPLASTIC PAVEMENT MARKINGS |
| 585624 | 230 L.F. | 24 IN. WHITE THERMOPLASTIC PAVEMENT MARKINGS |
| 801004 | 20 C.Y. | FURNISH AND INSTALL CONCRETE FOR SIGNAL FOUNDATION |
| 801106 | 38 L.F. | FURNISH AND INSTALL 4 IN. X 6 IN. WOOD SIGN SUPPORTS |
| 802501 | 550 L.F. | FURNISH AND INSTALL NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE |
| 810010 | 45 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE 1-CONDUCTOR NO. 4 A.W.G THHN/THWN |
| 811001 | 3 EACH | FURNISH AND INSTALL ELECTRICAL HANDHOLE |
| 813014 | 35 S.F. | INSTALL GROUND MOUNTED SIGN |
| 813015 | 141 S.F. | INSTALL OVERHEAD SIGN |
| 818052 | 2 EACH | FURNISH AND INSTALL 27 FT. STEEL POLE WITH A 70 FT. MAST ARM |
| 831010 | 2 EACH | FURNISH AND INSTALL 250 WATT HPS LUMINAIRE WITH PHOTOCELL |
| 833050 | 30 L.F. | FURNISH AND INSTALL 2 IN. PVC CONDUIT, SCHEDULE 80. RISER |
| 837001 | 7 EACH | FURNISH AND INSTALL GROUND ROD- 3/4 IN. DIAMETER X 10 FT. LENGTH |
| 838003 | 1 EACH | FURNISH AND INSTALL CONTROL AND DISTRIBUTION EQUIPMENT |
| 860270 | 12 EACH | FURNISH AND INSTALL 8 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION |
| 860272 | 50 EACH | FURNISH AND INSTALL 12 IN. VEHICULAR TRAFFIC SIGNAL HEAD SECTION |
| 860278 | 12 EACH | FURNISH AND INSTALL 12 IN. PEDESTRIAN SIGNAL HEAD SECTION - POLE MOUNT |
| 860292 | 4 EACH | CUT, CLEAN, GALVANIZE AND CAP TRAFFIC |
| 861105 | 350 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (NO. 14 A.W.G.) |
| 861106 | 1450 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE- 3 CONDUCTOR (NO. 14 A.W.G.) |
| 861107 | 275 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE- 5 CONDUCTOR (NO. 14 A.W.G.) |
| 861108 | 3600 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE- 7 CONDUCTOR (NO. 14 A.W.G.) |
| 861116 | 600 L.F. | FURNISH AND INSTALL ELECTRICAL CABLE- 2 CONDUCTOR (NO. 12 A.W.G.) |
| 866104 | 2 EACH | FURNISH AND INSTALL 20 FT. STREET LIGHT ARM |
| 870160 | 20 L.F. | FURNISH AND INSTALL 2 IN, SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED |
| 870166 | 160 L.F. | FURNISH AND INSTALL 4 IN, SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED |
| 870168 | 440 L.F. | FURNISH AND INSTALL 4 IN. SCHEDULE 80 RIGID PVC CONDUIT - SLOTTED |
| 871202 | 1 EACH | INSTALL CONTROLLER AND CABINET - BASE MOUNT |
| 800000 | LUMP SUM | REMOVAL AND DISPOSAL OF EXISTING MATERIAL AND EQUIPMENT |
| 800000 | 1 EACH | FURNISH AND INSTALL 27 FT. STEEL POLE WITH A 60 FT. MAST ARM |
| 800000 | 1 EACH | FURNISH AND INSTALL 27 FT. STEEL POLE WITH A 50 FT. MAST ARM |
| | | |

TSP-4

MARYLAND DOT - STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety Office of Traffic & Safety TRAFFIC ENGINEERING DESIGN DIVISION

I" = 20'

1/20/01

DATE:

VVX/ARSS/AV Whitman, Requardt and Associates. LLP 2315 Saint Paul Street Baltimore, Maryland 21218 SCALE: (410) 235-3450

TRAFFIC SIGNALIZATION PLAN MD 97 (GEORGIA AVE.) AND BEL PRE ROAD DRAWN BY: S.BLOSS F.A.P. NO. TS NO. CHECKED BY: N.LEARY S.H.A. NO.

LOG MILE:

TS-3337B SHEET NO. COUNTY: MONTGOMERY T.I.M.S. NO. D728 18 OF 24

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